

<English Language Translation>

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[0010]

[Means for Solving the Problem]

In the information providing system of the present invention, the information providing system providing facility information to a user
10 is characterized by including: i) a facility data storage unit to store facility information related to the facility; ii) a facility selection processing unit to select the facility to be proposed to a user using the facility information stored in the facility data storage unit and output the facility information about the facility selected; iii) a
15 schedule setting processing unit to receive from a user a specified available hour when the user prefers to be provided with information, and based on the received available hour, the facility selection processing unit is directed to select facility, and the facility information about the facility where the facility selection processing
20 unit selected is inputted, and then proposal schedule to be provided to the user is created using the inputted facility information and the received available hour, iv) a schedule storage unit to store the proposal schedule which the above-mentioned schedule setting processing unit created, and v) a processing unit corresponding to
25 the user to provide the proposal schedule stored in the schedule storage unit.

[0011] The above-mentioned schedule setting processing unit is characterized by receiving the input of available time from the user, registering the available time received from the user as the
30 schedule of not set up to the above-mentioned schedule storage unit, and also searching the above-mentioned schedule storage unit at an optional time and extracting a schedule not setting up, and

- based on the extracted schedule not set up, directing to select a facility to the above-mentioned facility selection processing unit, creating a proposal schedule using the inputted facility information from the above-mentioned facility selection processing unit and the
- 5 schedule not set up, and then updating the above-mentioned schedule not set up which was stored in the above-mentioned schedule storage unit using the created proposal schedule.
- [0012] The above-mentioned schedule storage unit is further characterized by storing the registration schedule which a user
- 10 registers. The above-mentioned schedule setting processing unit is characterized by extracting the available time when the schedule of the user is not set up using either at least the registration schedule which was stored in the above-mentioned schedule storage unit and the proposal schedule, directing to select a facility
- 15 to the above-mentioned facility selection processing unit based on the extracted available time, inputting the facility information about facility selected by the facility selection processing unit, and creating the schedule using the inputted facility information and the extracted available hour.
- 20 [0013] The above-mentioned processing unit corresponding to a user is characterized by receiving inputting of re-proposal directing re-selecting the facility for the provided proposal schedule, and directing to select again the facility included in the above-mentioned proposal schedule to the above-mentioned
- 25 schedule setting unit. The above-mentioned schedule setting unit is characterized by inputting the direction of a re-proposal from the above-mentioned processing unit corresponding to a user and the above-mentioned proposal schedule, directing to select a facility to the above-mentioned facility selection processing unit based on the
- 30 proposal schedule, updating the proposal schedule using the facility information inputted from the above-mentioned facility selection

processing unit and storing the updated proposal schedule into the above-mentioned schedule storage unit.

[0014] The information providing system is further characterized by equipping with the user individual data storage unit storing by
5 associating the individual information about a user with the user identifier which identifies a user, and the above-mentioned facility selection processing unit is characterized by choosing a facility using the above-mentioned facility information and also the individual information stored in the above-mentioned user
10 individual data storage unit.

[0015] The above-mentioned schedule setting unit is characterized by including, as a proposal schedule, at least a schedule number to identify the proposal schedule, a user identifier to identify a user, a subject indicating the subject of the schedule, a time executing the
15 schedule, a place executing the schedule and the facility information, and also creating a proposal schedule including a pre-schedule number to identify the previous schedule and a post-schedule number to identify the schedule afterward.

[0016] The above-mentioned schedule setting unit is characterized
20 by creating the proposal schedule containing the user identifier which identifies a user, extracting a user identifier from the above-mentioned proposal schedule, and outputting the extracted user identifier to the above-mentioned facility selection processing unit. The above-mentioned facility selection processing unit in
25 characterized by inputting user identifier from the above-mentioned schedule setting unit, reading either at least the registration schedule stored in the above-mentioned schedule storage unit or proposal schedule based on the inputted user identifier, and in addition to the above-mentioned facility information, choosing a facility using the facility information included at least either the
30 read-in registration schedule or proposal schedule.

[0017] The above-mentioned proposal schedule is further characterized by including a type of an attendant executing the schedule, the above-mentioned schedule setting unit is characterized by extracting the type of the attendant from the
5 proposal schedule, outputting the extracted type of attendant to the above-mentioned facility selection unit, and the above-mentioned facility selection unit is characterized by inputting the type of the attendant from the above-mentioned schedule setting unit, and choosing the facility using the facility information and also the
10 inputted type of attendant.

[0018] The above-mentioned processing unit corresponding to a user is characterized by receiving, from a user, a direction of either re-proposal which requests to select the facility information again in the above-mentioned proposal schedule or deleting the
15 above-mentioned proposal schedule, when the units receives the direction of re-proposal, the units directs the above-mentioned schedule setting unit to select facility information included in the proposal schedule again. And the unit updates the above-mentioned proposal schedule using the facility information
20 inputted from the above-mentioned facility selection processing unit and stores the updated proposal schedule to the above-mentioned schedule storage unit, when the units receives the direction to delete the proposal schedule, the proposal schedule is deleted from the above-mentioned schedule storage unit.

25 [0019] The above-mentioned user individual data storage unit is characterized by storing the facility introductory history which shows the history of offering facility information to the user as individual information. The above-mentioned processing unit corresponding to a user is characterized by reading facility
30 introductory history from the above-mentioned user individual data storage unit and storing as facility introductory history by associating the facility identifier which identifies the facility

information included in the above-mentioned proposal schedule and the directions from the user received to the above-mentioned proposal schedule into the above-mentioned user individual storage unit.

- 5 [0020] The information providing system is characterized by having the processing unit corresponding to the registrant for receiving the input of facility information from the facility information registrant who registers facility information, assigning the facility identifier to identify the received facility information, and storing the
10 above-mentioned facility information by associating with facility identifier in the above-mentioned facility data-storage unit.

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- 15 [Embodiment]

[0137] Figure 26 is figure which expresses an example of a schedule screen on the day (available time was inputted by the user) which specifies available time. And also figure 27 is a figure which expresses an example of a schedule screen on the day which does not specify available time. The set-up available time is displayed as "not yet" in titles of 2601 and 2602 as shown in the schedule screen 2600 of figure 26 on the day. Although the condition of "not yet" indicates available time, the condition that the scheduled proposal is not made by the information providing system 106 is shown. In addition, when the information providing system 106 extracts available time, selection of a facility is carried out continuously by the facility selection processing 213. Therefore, since the selected schedule will be in the condition of proposal (proposing) immediately, it will not be in the condition of "not yet."
25 The contents of a schedule of the set-up available time are described as a keyword used at the time of selecting facility, when a user inputs, any one of a location, a title, and an attendant. At a
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step Se 03, in a processing for finding available time from the schedule before and after by the schedule setting processing 211, the contents of a schedule are read in from a pre-schedule number and a post-schedule number, the available time that can be proposed is extracted. For example, if it is more than one hour, the available time to be extracted can be specified by specifying the duration of the time of proposing and so on. Moreover, regarding the first schedule or the last schedule of one day, the duration can be obtained by specifying the scheduled start time and scheduled end time of one day from the usual life pattern (data being held beforehand).

[0138] Next, there are two ways of selecting location in step Se 03. One is executed by a user with the schedule edit display 2400 indicated in the step Sc 15 of the processing 207 corresponding to a user, the user specifies the location as the schedule content where the proposal is not set up clearly. Another way is that the information providing system 106 finds the location from the schedule before and after, and the contents of schedule before and after are read in from a pre-schedule number and a post-schedule number, and presumes the range of movable area in an available time based on each location set up in the contents of the schedule before and after and also the extracted set-up schedule and two or more locations are selected as candidates. In the case where the scheduled locations before and after are the same, the candidate location to be selected is surely the same. Moreover, regarding the first schedule or the last schedule of one day, the candidate location can be obtained by specifying the scheduled start location and scheduled end location from the usual life pattern.

[0139] Next, as a processing of a case where an attendant is not clearly specified in step Se 03, a setting process of an attendant is available. An attendant is specified by the user ID assigned to attendant's type or the attendant. When the attendant is not

specified by the user, the schedule setting processing 211 sets up the user ID assigned to attendant's type or the attendant. The contents of a schedule are read in from a pre-schedule number and a post-schedule number, and if it is the same attendant, it is
5 selected as an attendant. Step Se 04 and step Se 07 show the loop processing which performs step Se 05 and step Se 06 to all the available time specified by the user and all the extracted available time. The step Se 05 and step Se 06 which are performed at every available time are described below. At step Se 05, when available
10 time is not specified clearly, the temporary contents of a schedule are newly created. Describing as temporary is because that deleting processing is performed when a suitable facility is not selected by the facility selection processing 213 mentioned later, and the processing is not a different processing from registration
15 processing of the new schedule which is performed in the step Sc 16 of the processing 207 corresponding to a user. As scheduled number, a certain number in the schedule storage unit 204 is generated, the extracted available time, selected candidate location, selected attendant are stored in the schedule storage unit 204 as
20 the contents of a new schedule.

[0140] Next, step Se 05 starts up the facility selection processing 213 (the detail of facility selection processing is mentioned later), and makes a control unit 202 perform. Step Se 05 gives a scheduled number over to the facility selection processing 213 to be
25 started up. When the started facility selection processing 213 has the facility information to propose, the facility specification ID (in the case of the embodiment, registrant ID is used) which specifies facility information is returned to step Se 05 which called the ID. The processing is proceeded from step Se 06 to step Se06b, when
30 the facility specification ID is not given over from the facility selection processing 213. In a step Se 05, step Se06b deletes a temporary schedule when the temporary schedule is created in the

schedule storage unit 204. The processing is proceeded from step Se 06 to step Se06a, when the facility specification ID is given over from the facility selection processing 213. Step Se06a searches based on the scheduled number which specified the schedule 5 storage unit 204, obtains the contents of a schedule applicable to the above-mentioned schedule number, changes the contents of the title of the obtained contents of a schedule, a location, and a note, and stores the changed contents of a schedule in the schedule storage unit 204. At this time, the contents of the proposal facility 10 ID are set up to the facility specification ID (the case of the embodiment, the registrant ID) given over from the facility selection processing 213. Moreover, step Se06a creates the proposal facility ID and the status of the proposal facility ID as an item of the facility introductory history included in the user 15 individual data corresponding to the user ID stored in the user individual data storage unit 206 from User ID, and sets up as the "proposing" status.

- [0141] In the above, the schedule setting processing 211 is explained using the display screen related to figure 25. The 20 schedule setting processing 211 finds out the available time in the schedule of the day for each user registered in the information providing system, selects the facility to be provided using the facility selection processing 213 to the available time found out and the schedule specified to request providing information, selects a 25 facility to be provided using the facility selection processing 213 for the schedule indicating to request the found-out available time and providing information, creates a new schedule linked to the facility information and provides a function to write information related to facility information specified clearly in the schedule.
- [0142] Next, the processing flow of the facility selection processing 30 213 is explained. The facility selection processing 213 is started up from the processing 207 corresponding to a user and the schedule

setting processing 211, and performed in the control unit 202 of the information providing system 106. Facility selection processing 213 selects a suitable facility which is searched out of the registered facilities in the facility data-storage unit 205, using the information 5 on the location which selects the scheduled number given over from the processing 207 corresponding to a user and the schedule setting processing 211, and a facility as mentioned above, and returns the facility specification ID to specify the facility to the processing where the ID called. Figure 28 is one example of the flow chart of 10 processing of facility selection processing. In step Sf01, based on the given-over scheduled number, the contents of the schedule are read in from the schedule storage unit 204, in step Sf02 information such as sex, age, and preference that shows a user's personal attributes and introductory history are read in from the user 15 individual data storage unit 206 based on User ID. In the next step Sf03 and step Sf11, the loop processing performed in step Sf04 to step Sf10 to facility information set up a flag in introducing the facility out of the whole facility information stored in the facility data storage unit 205 is shown.

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[0156] Next, to step Sb18 of the processing 210 corresponding to a registrant of figure 11, in addition to the facility introduction 25 individual information screen 1500 which step Sb18 displays on an information registrant terminal, the external factor and the time factor which were set up are added to the contents of a display, and the external factor and the time factor at the time of providing a user with facility information are shown to an information registrant. 30 The external factor and the time factor displayed are read from the introductory history of the corresponding user stored in the user individual data storage unit 206. Next, to step Sb12 of the

- processing 210 corresponding to a registrant of figure 11, in addition to the download screen 1700 which step Sb12 displays on an information registrant terminal, the external factor and the time factor which were set up are added to the contents of a display, and
- 5 the external factor and the time factor at the time of introducing facility information to an information registrant are shown. The external factor and the time factor displayed are read from the facility introduction setting information stored in the facility data storage unit 205.
- 10 [0157] In order to build the embodiment, in case the facility information to be introduced to a user is selected, it is necessary to add a new decision step between step Sf05 and the step Sf10 of facility selection processing of figure 26 so that the external factor and the time factor are taken into consideration. In adding step,
- 15 adding the conditions of the facility introduction setting information stored in the facility data storage unit 205, and the processing which compares the external factor with the time factor which are obtained from the external-factors unit and the time acquisition unit respectively, when the external factor and the time factor are the same, it is judged to perform step Sf10.
- 20 [0158] Moreover, in order to build the embodiment, for including the external factors and the time factor in the individual introduction result to an information registrant, it is necessary to save the external factor and the time factor at the time of introducing a facility to a user. In step Se 06a of schedule setup in figure 24 and step Se06 of the processing corresponding to a user in figure 18, in addition to the processing adding the facility specification ID to the introductory history of the user personal-data storing area 206, the area which stores the external factor and the
- 25 time factor are obtained and added.
- 30 [0159]
- [Third Embodiment]

With the facility information providing system explained in the embodiment 1, it is explained about a case that the mobile terminal using a wireless line which is used by the user was used. However, a user may use the terminal using a wire line. As far as the

5 terminal which a user uses is a terminal (equipment) connectable with the Internet, the terminal may be something else other than mobile terminal. Moreover, it may be dependent on the terminal whether a wire line is used or a wireless line is used by the user.

[0160]

10 [Fourth embodiment]

In above-mentioned embodiment, it is explained about a case that when a control unit 202 carries out each program stored in the program data storage unit 203 and each processing is performed. However, each processing is not necessarily restricted to the case

15 where the each processing is realized by program. The processing may be performed by the other methods (for example, the method using software (program) and hardware).

[0161]

[Fifth embodiment]

20 The program which realizes each processing stored in the program data storage unit 203 indicated in figure 2 is able to be stored in the record medium which is readable by the computer. The program data can be read from the above-mentioned record medium into the storage area (in figure 2, it is equivalent to the program data storage

25 unit 203) equipped in a computer and can be executed

[0162]

[Effect of the Invention]

According to the information providing system (information offering equipment) of this invention, when a user specifies available time or

30 a location, facility information can be selected and a proposal schedule can be created. Therefore, a user's convenience and operability can be raised.

[0163] According to the information providing system of this invention, by specifying available time (either start or end) and a location by a user, and registering as a schedule of not set up, facility information can be selected and proposal schedule can be created.

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[0164] According to the information providing system of this invention, based on the registered schedule and proposed proposal schedule, available time is extracted, and based on the extracted available time, proposal schedule can be created.

10 [0165] According to this invention, the created proposal schedule can be registered, be re-proposed and be deleted. Furthermore, a part of contents of the created proposal schedule can also be edited. Therefore, a user's convenience can be raised.

15 [0166] Furthermore, facility information can be selected based on individual information.

[0167] It is possible to include a time, a location, and a facility information in a proposal schedule, and also by including a pre-schedule number and a post schedule number, it is possible to associate the previous schedule and the schedule afterward.

20 [0168] According to this invention, facility information can be selected by considering the schedule in the future from the schedule in the past stored in the schedule storage unit.

[0169] According to this invention, facility information can be selected based on the type of attendant who accompanies a user.

25 [0170] According to this invention, a user can demand for a re-proposal or for deleting about the proposal schedule stored in the schedule storage unit.

[0171] By storing facility introductory history in the user individual data storage unit, facility selection processing can select facility information based on facility introductory history.